

## Claims:

1. Apparatus (1) for treating wafer-shaped articles comprising
  - 1.1a linear arranged array of a plurality of at least two process units (31, 33) wherein in each such process unit one single wafer-shaped article (Wm) can be treated
  - 1.2a cassette-holding unit (15) for holding at least one cassette storing at least one wafer-shaped article therein
  - 1.3a transport system for picking a wafer-shaped article from a cassette and placing it into one of a process unit
  - 1.4the transport system comprising:
    - 1.4.1 at least one linear track (26) arranged parallel to the array of the plurality of process units (31, 33) for moving at least one single wafer-shaped article along a linear path parallel to the array of the plurality of process units
    - 1.4.2 a transport unit (46) movably mounted on each of said at least one linear track (26); said transport unit comprising at least one holding means (46a) for holding a single wafer-shaped article in a substantially vertical plane parallel to the linear track.
2. Apparatus as claimed in claim 1 wherein the transport unit (46) has a pivoting (66) mechanism for pivoting (P) the wafer-shaped article from a substantially vertical state to a substantially horizontal state.
3. Apparatus as claimed in claim 1 comprising a front unit wherein an array of at least two cassette-holding units (15) for holding cassettes storing a plurality of wafer-shaped articles is arranged and a transfer unit (84, 86) for transferring the wafer-shaped article between the cassette and the transport unit (46) of the at least one linear track (26).
4. Apparatus as claimed in claim 1 comprising at least one transfer station (22) for temporarily storing the wafer-shaped article (Wt), the transfer station being accessible by the transfer unit (84, 86) movably mounted on the linear track.
5. Apparatus as claimed in claim 4 wherein said transfer station (22) comprises a flip mechanism for flipping (Fv) the wafer-shaped article.

6. Apparatus as claimed in claim 4 wherein said transfer station comprising a holding unit (42) with two holding devices (42a, 42b) arranged in a back-to-back configuration.
- 5 7. Apparatus as claimed in claim 1 wherein said transport unit (46) comprises a flip mechanism for flipping the wafer-shaped article and two holding devices (46a, 46b).
8. Apparatus as claimed in claim 7 wherein the two holding devices (46a, 46b) are arranged in a back-to-back configuration.
- 10 9. Apparatus as claimed in claim 1 with a transport system comprising at least two of said at least one linear tracks (24, 26).